



12685 - Enabling Dark Energy Science for JWST and Beyond

Cycle: 19, Proposal Category: GO

(Availability Mode: AVAILABLE)

INVESTIGATORS

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VISITS

<i>Visit</i>	<i>Targets used in Visit</i>	<i>Configurations used in Visit</i>	<i>Orbits Used</i>	<i>Last Orbit Planner Run</i>	<i>OP Current with Visit?</i>
01	(1) HD-37725	WFC3/IR	1	22-Apr-2013 21:24:25.0	yes
02	(2) HD-116405	WFC3/IR	1	22-Apr-2013 21:24:38.0	yes
04	(4) HD-205905	WFC3/IR	1	22-Apr-2013 21:24:52.0	yes
05	(5) LTT-13402	WFC3/IR	1	22-Apr-2013 21:25:03.0	yes
06	(7) HD-27836	WFC3/IR	1	22-Apr-2013 21:25:19.0	yes
07	(8) LTT-2351	WFC3/IR	1	22-Apr-2013 21:25:31.0	yes
09	(13) HD-38949	WFC3/IR	1	22-Apr-2013 21:25:42.0	yes
10	(14) HD-60753	WFC3/IR	1	22-Apr-2013 21:25:52.0	yes
81	(16) 2MASS-J17571324+6703409	WFC3/IR	1	22-Apr-2013 21:26:10.0	yes
82	(17) 2MASS-J18083474+6927286	WFC3/IR	1	22-Apr-2013 21:26:22.0	yes
83	(3) HD-180609	WFC3/IR	1	22-Apr-2013 21:26:46.0	yes

<i>Visit</i>	<i>Targets used in Visit</i>	<i>Configurations used in Visit</i>	<i>Orbits Used</i>	<i>Last Orbit Planner Run</i>	<i>OP Current with Visit?</i>
84	(15) BD+52-913	WFC3/IR	1	22-Apr-2013 21:27:02.0	yes
88	(12) BD+60-1753	WFC3/IR	1	22-Apr-2013 21:27:15.0	yes
89	(1) HD-37725	WFC3/IR	1	22-Apr-2013 21:27:25.0	yes
5B	(5) LTT-13402	WFC3/IR	1	22-Apr-2013 21:27:35.0	yes

15 Total Orbits Used

ABSTRACT

We propose NICMOS grism observations of 15 carefully selected stars with the immediate objective of establishing their Absolute Physical Flux (ABF), and an ultimate goal of achieving the sub-1% absolute photometric accuracies required by Dark Energy science with JWST and other facilities. Even with the best data available, the current determination of ABFs is plagued by the reliance on the Vega photometric system, which is known to be problematic primarily due to the fact that Vega is a pole-on rapid rotator with an infrared excess from its circumstellar disk! It will also be too bright for the use by the next generation of large aperture telescopes including JWST. In an effort to remedy these difficulties, teams from the National Institute of Standards (NIST), the University of New Mexico, Johns Hopkins University and STScI have begun to develop a catalog of stars that have spectral energy distributions that are tied directly to NIST (diode) standards with very precisely determined physical characteristics. A key element in this pursuit has been the efforts at STScI to measure the spectra of many of these objects with STIS. We now propose to extend this effort into the near-IR with NICMOS grism observations. NICMOS is crucial in order to extend the wavelength coverage to the K-band, which in turn enables the SEDs to be reliably extended, with high fidelity, to mid-IR data from Spitzer.

OBSERVING DESCRIPTION

Stars brighter than $\sim V=8$ are observed using spatial scanning in both WFC3/IR grisms, in the +1st order.

Stars brighter than $V \sim 5$ mag are observed using spatial scanning, in both grisms, and POS TARGS are used to place the -1st orders in the center of the IR detector. This allows a slower scanning rate to be used.

Stars fainter than $V \sim 9$ mag are observed in the traditional stare mode, and are dithered spatially.

The goal is to obtain very high signal to noise spectra in the near infrared, where $SNR > 1000$ per resolution element. In scanning mode, we image onto ~ 400 rows, in stare mode, dithers consisting of 8 to 16 separate pointings are used.

Scanning rates greater than or equal to 1 arcsecond per second use the GYRO mode, and have large (up to 30 seconds) errors in position, we take a dark frame with FGS pointing control to place the star at the desired position on the array and then start the scanning observations.

Visits that use darks are Visit 04 and Visit 14.

ADDITIONAL COMMENTS

in Aug 2012 changed the scan rates for visits 2,4,6, and 7 to avoid saturation. This also means changing the total exptime (NSAMP and SAMP_SEQ) to keep the scanned spectrum to about 100 rows.

For the G141 grism the changes are:

LTT 2351 To: 0.852713178 From 1.26

HD27836 To: 1.145833333 From 0.58

HD205905 To: 2.037037037 From < 1

HD116405 To: 0.173775671 From 0.07

For the G102 grism change the rate to:

Visit7 LTT 2351 0.547263682 From 0.6

Visit6 HD27836 0.733333333 From 0.412

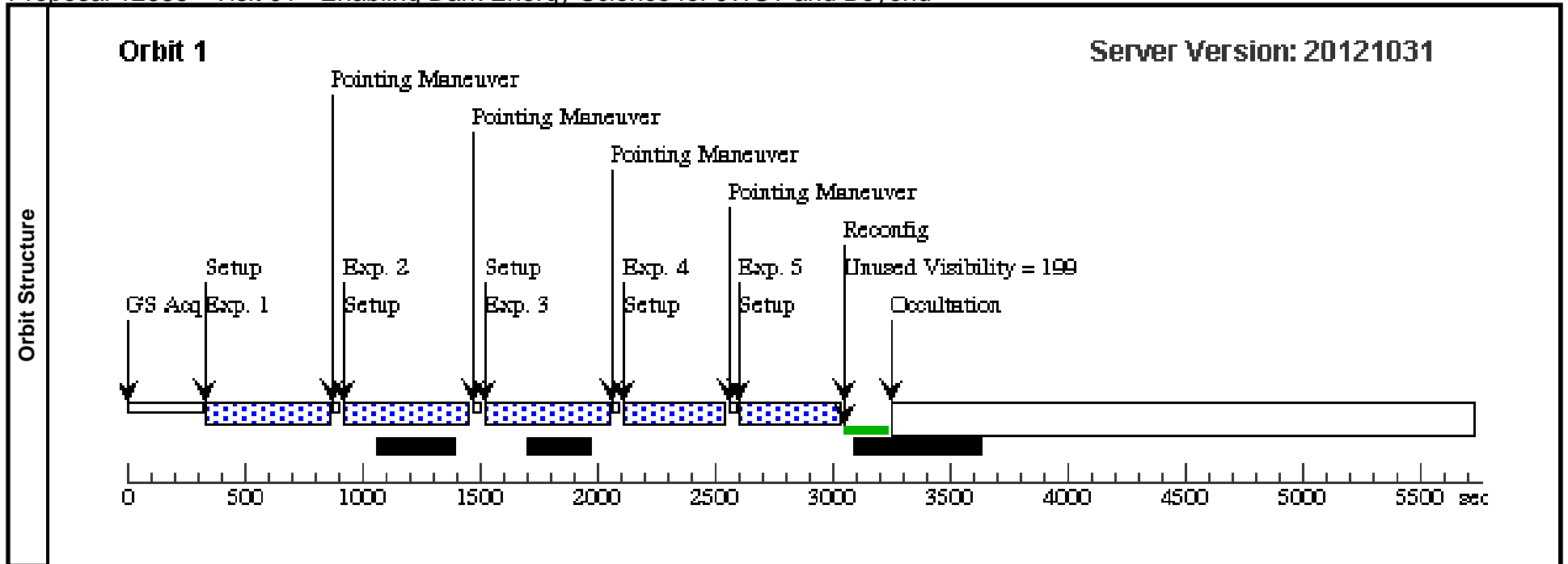
Visit4 HD205905 1.358024691 From 0.687

Visit2 HD116405 0.112820513 From 0.00888

Proposal 12685 - Visit 01 - Enabling Dark Energy Science for JWST and Beyond

Tue Apr 23 01:27:45 GMT 2013

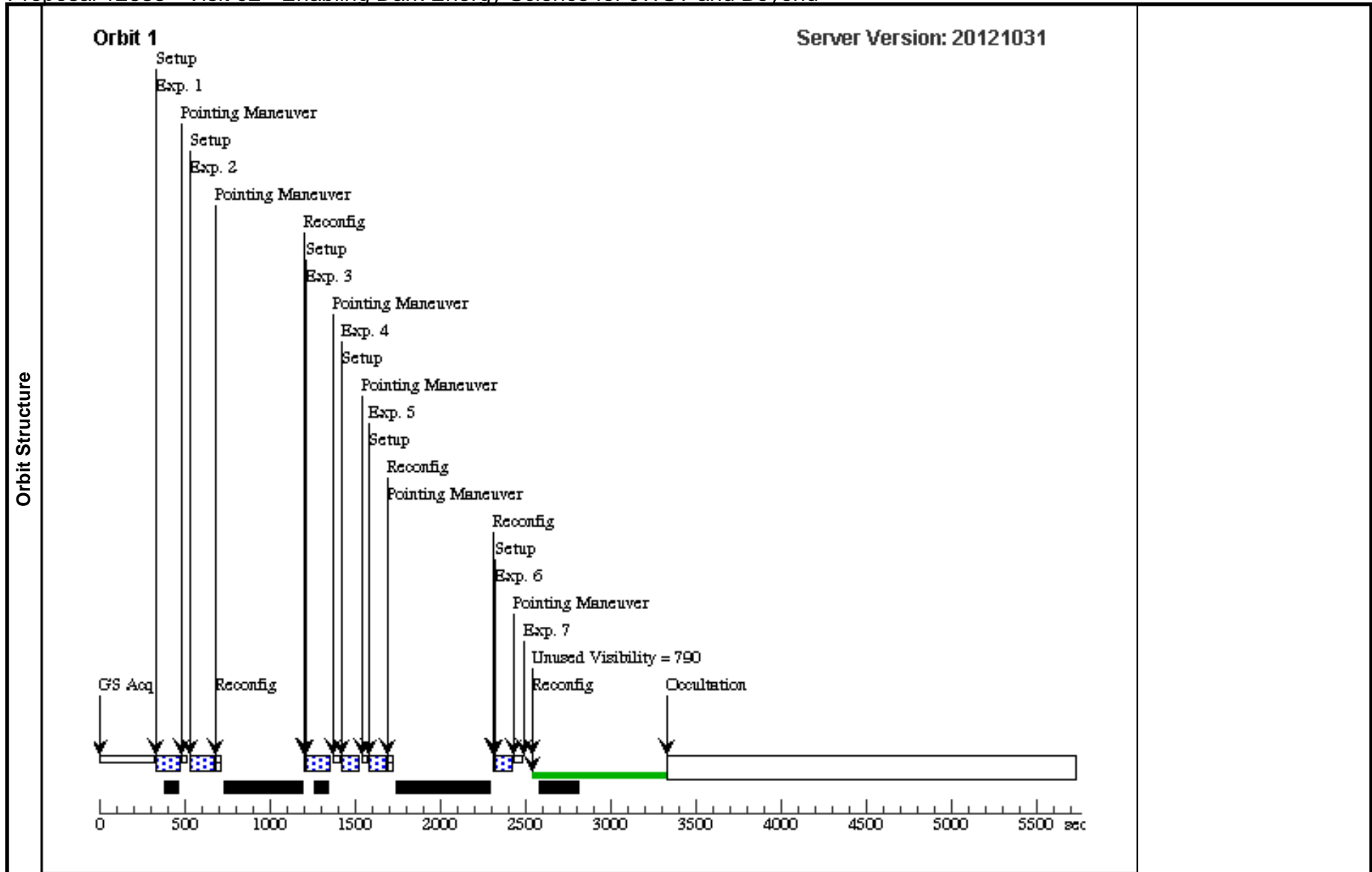
Fixed Targets	Visit									
	Proposal 12685, Visit 01, failed Diagnostic Status: No Diagnostics Scientific Instruments: WFC3/IR Special Requirements: (none)									
#	Name	Target Coordinates	Targ. Coord. Corrections	Fluxes	Miscellaneous					
(1)	HD-37725	RA: 05 41 54.3707 (85.4765446d) Dec: +29 17 50.93 (29.29748d) Equinox: J2000	Proper Motion RA: 16.40 mas/yr Proper Motion Dec: -30.60 mas/yr Epoch of Position: 2000	V=8.82	Reference Frame: ICRS					
<i>Comments: This object was generated by the targetselector and retrieved from the SIMBAD database.</i>										
Exposures	#	Label	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time/[Actual Dur.]	Orbit
	1	HD37725-G 102	(1) HD-37725	WFC3/IR, MULTIACCUM, IR	G102	NSAMP=11; SAMP-SEQ=SPAR S50	POS TARG 23,-28; SPATIAL SCAN 0.1 055,90.0 Degrees,Forward		[==>]	[1]
	2	HD37725-G 102	(1) HD-37725	WFC3/IR, MULTIACCUM, IR	G102	NSAMP=11; SAMP-SEQ=SPAR S50	POS TARG 23,-28; SPATIAL SCAN 0.1 055,90.0 Degrees,Forward		[==>]	[1]
	3	HD37725-G 102	(1) HD-37725	WFC3/IR, MULTIACCUM, IR	G102	NSAMP=11; SAMP-SEQ=SPAR S50	POS TARG 23,-28; SPATIAL SCAN 0.1 055,90.0 Degrees,Forward		[==>]	[1]
	4	HD37725-G 141	(1) HD-37725	WFC3/IR, MULTIACCUM, IR	G141	NSAMP=9; SAMP-SEQ=SPAR S50	POS TARG 23,-28; SPATIAL SCAN 0.1 336,90.0 Degrees,Forward		[==>]	[1]
	5	HD37725-G 141	(1) HD-37725	WFC3/IR, MULTIACCUM, IR	G141	NSAMP=9; SAMP-SEQ=SPAR S50	POS TARG 23,-28; SPATIAL SCAN 0.1 336,90.0 Degrees,Forward		[==>]	[1]



Proposal 12685 - Visit 02 - Enabling Dark Energy Science for JWST and Beyond

Tue Apr 23 01:27:47 GMT 2013

Fixed Targets	#		Name	Target Coordinates	Targ. Coord. Corrections	Fluxes	Miscellaneous			
		(2)	HD-116405	RA: 13 22 45.1229 (200.6880121d) Dec: +44 42 53.90 (44.71497d) Equinox: J2000	Proper Motion RA: 8.15 mas/yr Proper Motion Dec: -8.71 mas/yr Epoch of Position: 2000	V=8.34	Reference Frame: ICRS			
<i>Comments: This object was generated by the targetselector and retrieved from the SIMBAD database.</i>										
Exposures	#	Label	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time/[Actual Dur.]	Orbit
	1	HD-116405	(2) HD-116405	WFC3/IR, MULTIACCUM, IR	G102	NSAMP=12; SAMP-SEQ=SPAR S10	POS TARG 23,-28; SPATIAL SCAN 0.1 128,90.0 Degrees,Forward; GS ACQ SCENARIO PAIR		[==>]	[1]
	2	HD-116405	(2) HD-116405	WFC3/IR, MULTIACCUM, IR	G102	NSAMP=12; SAMP-SEQ=SPAR S10	POS TARG -10,-28; SPATIAL SCAN 0.1 128,90.0 Degrees,Forward		[==>]	[1]
	3	HD-116405	(2) HD-116405	WFC3/IR, MULTIACCUM, IR	G102	NSAMP=12; SAMP-SEQ=SPAR S10	POS TARG -45,-28; SPATIAL SCAN 0.1 128,90.0 Degrees,Forward		[==>]	[1]
	4	HD-116405 G141	(2) HD-116405	WFC3/IR, MULTIACCUM, IR	G141	NSAMP=8; SAMP-SEQ=SPAR S10	POS TARG 23,+10; SPATIAL SCAN 0.1 738,90.0 Degrees,Forward		[==>]	[1]
	5	HD-116405 G141	(2) HD-116405	WFC3/IR, MULTIACCUM, IR	G141	NSAMP=8; SAMP-SEQ=SPAR S10	POS TARG -10,+10; SPATIAL SCAN 0.1 738,90.0 Degrees,Forward		[==>]	[1]
	6	HD-116405 G141	(2) HD-116405	WFC3/IR, MULTIACCUM, IR	G141	NSAMP=8; SAMP-SEQ=SPAR S10	POS TARG -45,+10; SPATIAL SCAN 0.1 738,90.0 Degrees,Forward		[==>]	[1]
	7	HD-116405 F126N	(2) HD-116405	WFC3/IR, MULTIACCUM, IR	F126N	NSAMP=1; SAMP-SEQ=RAPID	POS TARG 29,-28		[==>]	[1]

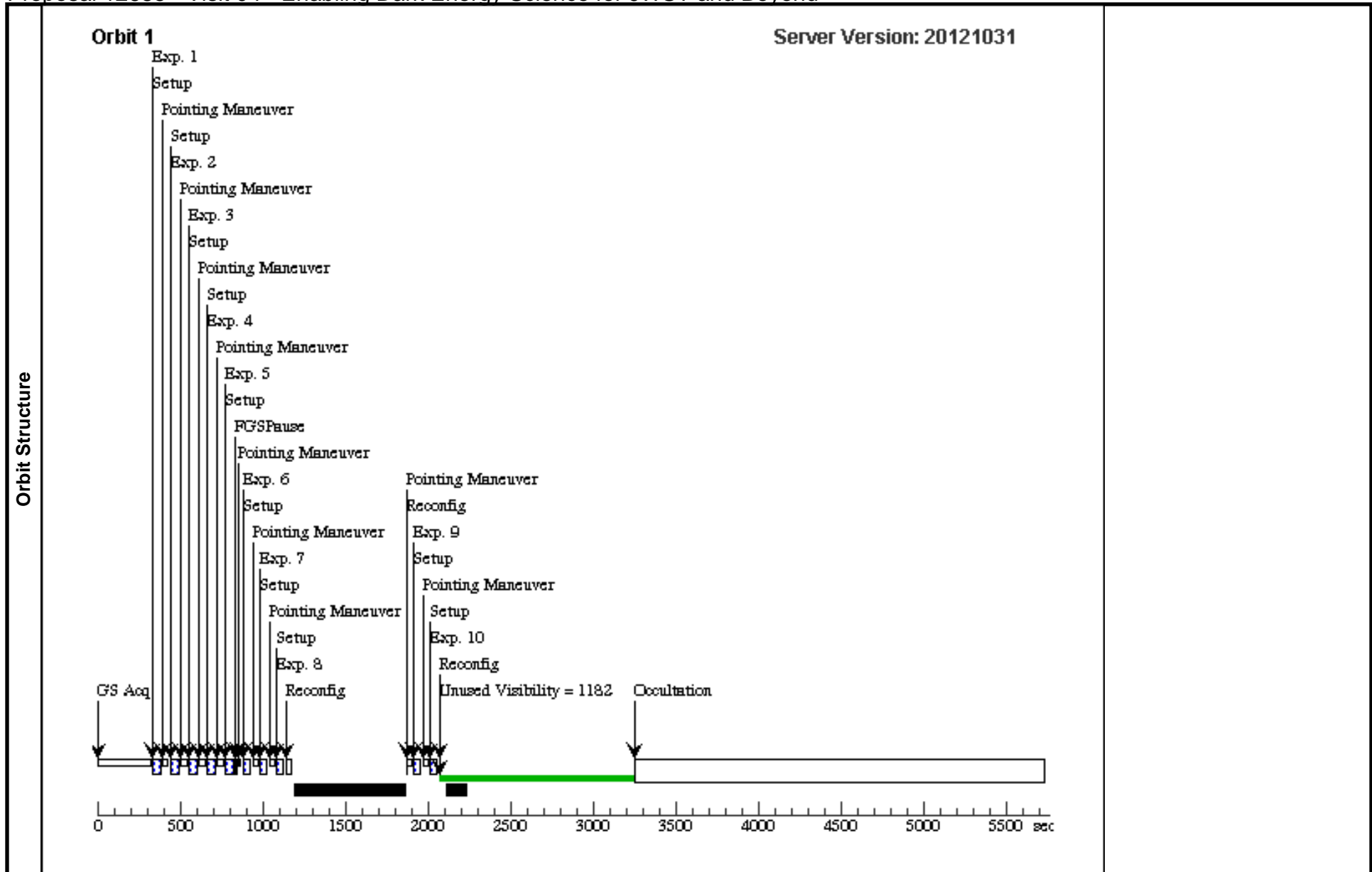


Proposal 12685 - Visit 04 - Enabling Dark Energy Science for JWST and Beyond

Visit	Proposal 12685, Visit 04, scheduling Tue Apr 23 01:27:48 GMT 2013 Diagnostic Status: No Diagnostics Scientific Instruments: WFC3/IR Special Requirements: (none)																		
	Fixed Targets	<table border="1"> <thead> <tr> <th>#</th> <th>Name</th> <th>Target Coordinates</th> <th>Targ. Coord. Corrections</th> <th>Fluxes</th> <th>Miscellaneous</th> </tr> </thead> <tbody> <tr> <td>(4)</td> <td>HD-205905</td> <td> RA: 21 39 10.1515 (324.7922979d) Dec: -27 18 23.67 (-27.30658d) Equinox: J2000 </td> <td> Proper Motion RA: 385.21 mas/yr Proper Motion Dec: -84.84 mas/yr Epoch of Position: 2000 </td> <td>V=6.74</td> <td>Reference Frame: ICRS</td> </tr> <tr> <td colspan="6"> <i>Comments: This object was generated by the targetselector and retrieved from the SIMBAD database.</i> </td> </tr> </tbody> </table>	#	Name	Target Coordinates	Targ. Coord. Corrections	Fluxes	Miscellaneous	(4)	HD-205905	RA: 21 39 10.1515 (324.7922979d) Dec: -27 18 23.67 (-27.30658d) Equinox: J2000	Proper Motion RA: 385.21 mas/yr Proper Motion Dec: -84.84 mas/yr Epoch of Position: 2000	V=6.74	Reference Frame: ICRS	<i>Comments: This object was generated by the targetselector and retrieved from the SIMBAD database.</i>				
#	Name	Target Coordinates	Targ. Coord. Corrections	Fluxes	Miscellaneous														
(4)	HD-205905	RA: 21 39 10.1515 (324.7922979d) Dec: -27 18 23.67 (-27.30658d) Equinox: J2000	Proper Motion RA: 385.21 mas/yr Proper Motion Dec: -84.84 mas/yr Epoch of Position: 2000	V=6.74	Reference Frame: ICRS														
<i>Comments: This object was generated by the targetselector and retrieved from the SIMBAD database.</i>																			

Proposal 12685 - Visit 04 - Enabling Dark Energy Science for JWST and Beyond

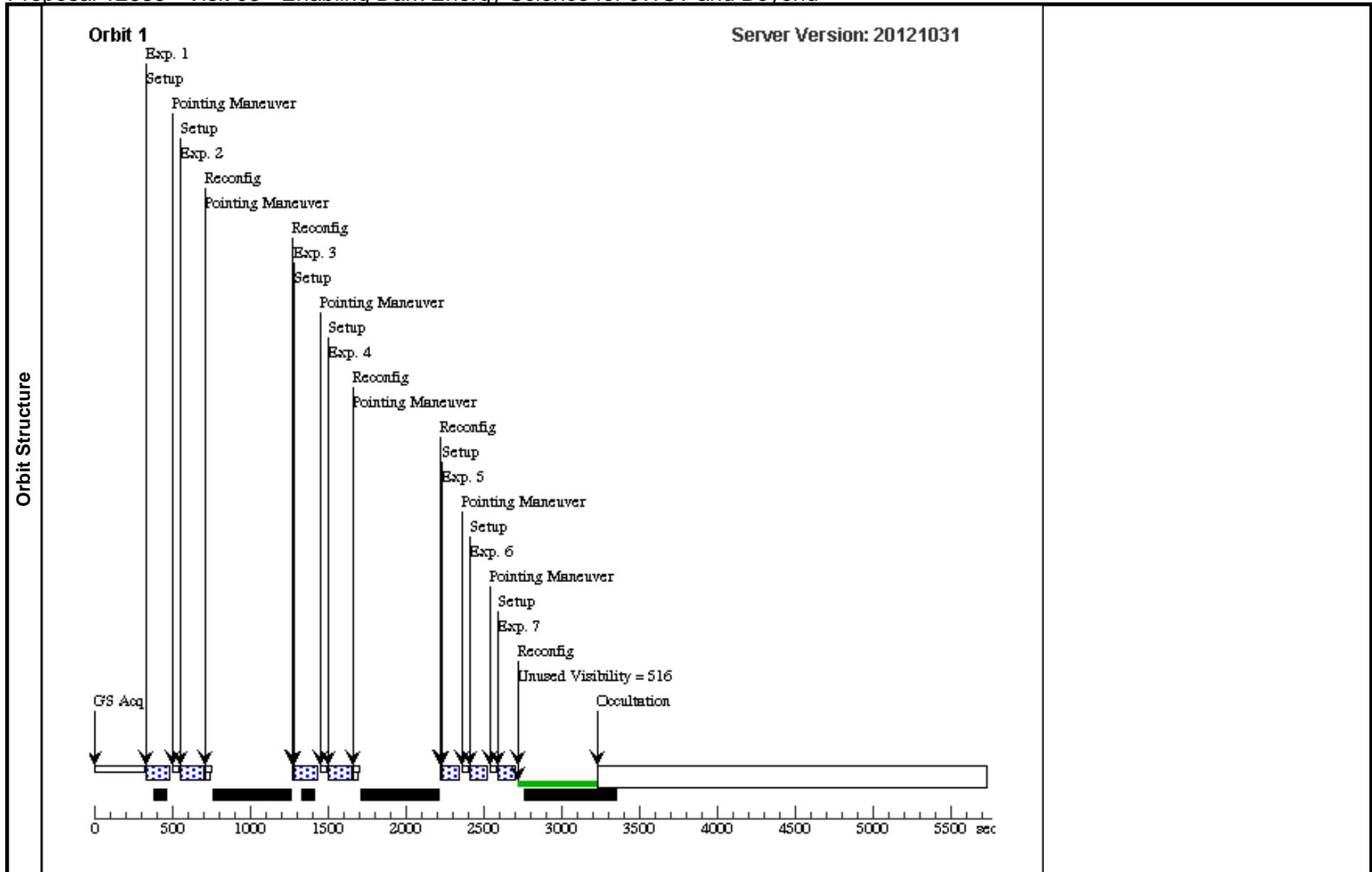
#	Label	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time/[Actual Dur.]	Orbit
Exposures	1	HD-205905- (4) HD-205905 G102	WFC3/IR, MULTIACCUM, IR	G102	NSAMP=4; SAMP-SEQ=RAPID	POS TARG 23,-20; SPATIAL SCAN 1.3 58,90.0 Degrees,Forward		[==>]	[1]
	2	HD-205905- (4) HD-205905 G102	WFC3/IR, MULTIACCUM, IR	G102	NSAMP=4; SAMP-SEQ=RAPID	POS TARG -10,-20; SPATIAL SCAN 1.3 58,90.0 Degrees,Forward		[==>]	[1]
	3	HD-205905- (4) HD-205905 G102	WFC3/IR, MULTIACCUM, IR	G102	NSAMP=4; SAMP-SEQ=RAPID	POS TARG -45,-20; SPATIAL SCAN 1.3 58,90.0 Degrees,Forward		[==>]	[1]
	4	HD-205905- (4) HD-205905 G102	WFC3/IR, MULTIACCUM, IR	G102	NSAMP=4; SAMP-SEQ=RAPID	POS TARG -25,-28; SPATIAL SCAN 1.3 58,90.0 Degrees,Forward		[==>]	[1]
	5	HD-205905- (4) HD-205905 G102	WFC3/IR, MULTIACCUM, IR	G102	NSAMP=4; SAMP-SEQ=RAPID	POS TARG +10,-28; SPATIAL SCAN 1.3 58,90.0 Degrees,Forward		[==>]	[1]
	6	HD-205905- (4) HD-205905 G141	WFC3/IR, MULTIACCUM, IR	G141	NSAMP=2; SAMP-SEQ=RAPID	POS TARG 23,+10; SPATIAL SCAN 2.0 37,90.0 Degrees,Forward; EXP PCS MODE GYRO		[==>]	[1]
	7	HD-205905- (4) HD-205905 G141	WFC3/IR, MULTIACCUM, IR	G141	NSAMP=2; SAMP-SEQ=RAPID	POS TARG -10,+10; SPATIAL SCAN 2.0 37,90.0 Degrees,Forward; EXP PCS MODE GYRO		[==>]	[1]
	8	HD-205905- (4) HD-205905 G141	WFC3/IR, MULTIACCUM, IR	G141	NSAMP=2; SAMP-SEQ=RAPID	POS TARG -45,+10; SPATIAL SCAN 2.0 37,90.0 Degrees,Forward; EXP PCS MODE GYRO		[==>]	[1]
	9	HD-205905- (4) HD-205905 G141	WFC3/IR, MULTIACCUM, IR	G141	NSAMP=2; SAMP-SEQ=RAPID	POS TARG -25,+10; SPATIAL SCAN 2.0 37,90.0 Degrees,Forward; EXP PCS MODE GYRO		[==>]	[1]
	10	HD-205905- (4) HD-205905 F126N	WFC3/IR, MULTIACCUM, IR	F126N	NSAMP=1; SAMP-SEQ=RAPID	POS TARG -25,+10; SPATIAL SCAN 2.0 37,90.0 Degrees,Forward; EXP PCS MODE GYRO		[==>]	[1]



Proposal 12685 - Visit 05 - Enabling Dark Energy Science for JWST and Beyond

Tue Apr 23 01:27:50 GMT 2013

Visit	Proposal 12685, Visit 05, implementation Diagnostic Status: No Diagnostics Scientific Instruments: WFC3/IR Special Requirements: (none)									
	Fixed Targets	#	Name	Target Coordinates	Targ. Coord. Corrections	Fluxes	Miscellaneous			
	(5)	LTT-13402 Alt Name1: HD106252	RA: 12 13 28.5094 (183.3687892d) Dec: +10 02 29.90 (10.04164d) Equinox: J2000	Proper Motion RA: 23.76 mas/yr Proper Motion Dec: -279.50 mas/yr Epoch of Position: 2000	V=7.36	Reference Frame: ICRS				
	<i>Comments: This object was generated by the targetselector and retrieved from the SIMBAD database.</i> GOV Proper motions are from SIMBAD									
Exposures	#	Label	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time/[Actual Dur.]	Orbit
	1	LTT 13402	(5) LTT-13402	WFC3/IR, MULTIACCUM, IR	G102	NSAMP=13; SAMP-SEQ=SPAR S10	POS TARG 23,-28; SPATIAL SCAN 0.4 12,90.0 Degrees,For ward; GS ACQ SCENARI O BASE1B3		[==>]	[1]
	2	LTT 13402	(5) LTT-13402	WFC3/IR, MULTIACCUM, IR	G102	NSAMP=13; SAMP-SEQ=SPAR S10	POS TARG 23,-28; SPATIAL SCAN 0.4 12,90.0 Degrees,For ward		[==>]	[1]
	3	LTT 13402	(5) LTT-13402	WFC3/IR, MULTIACCUM, IR	G102	NSAMP=13; SAMP-SEQ=SPAR S10	POS TARG 23,-28; SPATIAL SCAN 0.4 12,90.0 Degrees,For ward		[==>]	[1]
	4	LTT 13402	(5) LTT-13402	WFC3/IR, MULTIACCUM, IR	G102	NSAMP=13; SAMP-SEQ=SPAR S10	POS TARG 23,-28; SPATIAL SCAN 0.4 12,90.0 Degrees,For ward		[==>]	[1]
	5	LTT 13402	(5) LTT-13402	WFC3/IR, MULTIACCUM, IR	G141	NSAMP=9; SAMP-SEQ=SPAR S10	POS TARG 23,-28; SPATIAL SCAN 0.6 19,90.0 Degrees,For ward		[==>]	[1]
	6	LTT 13402	(5) LTT-13402	WFC3/IR, MULTIACCUM, IR	G141	NSAMP=9; SAMP-SEQ=SPAR S10	POS TARG 23,-28; SPATIAL SCAN 0.6 19,90.0 Degrees,For ward		[==>]	[1]
	7	LTT 13402	(5) LTT-13402	WFC3/IR, MULTIACCUM, IR	G141	NSAMP=9; SAMP-SEQ=SPAR S10	POS TARG 23,-28; SPATIAL SCAN 0.6 19,90.0 Degrees,For ward		[==>]	[1]



Proposal 12685 - Visit 06 - Enabling Dark Energy Science for JWST and Beyond

Visit	Proposal 12685, Visit 06, completed Tue Apr 23 01:27:51 GMT 2013 Diagnostic Status: No Diagnostics Scientific Instruments: WFC3/IR Special Requirements: (none)					
	Fixed Targets	#	Name	Target Coordinates	Targ. Coord. Corrections	Fluxes
(7)		HD-27836	RA: 04 24 12.4569 (66.0519038d) Dec: +14 45 29.54 (14.75821d) Equinox: J2000	Proper Motion RA: 97.74 mas/yr Proper Motion Dec: -33.95 mas/yr Epoch of Position: 2000	V=7.58	Reference Frame: ICRS
Comments: This object was generated by the targetselector and retrieved from the SIMBAD database. Proper motions as in simbad G1V						

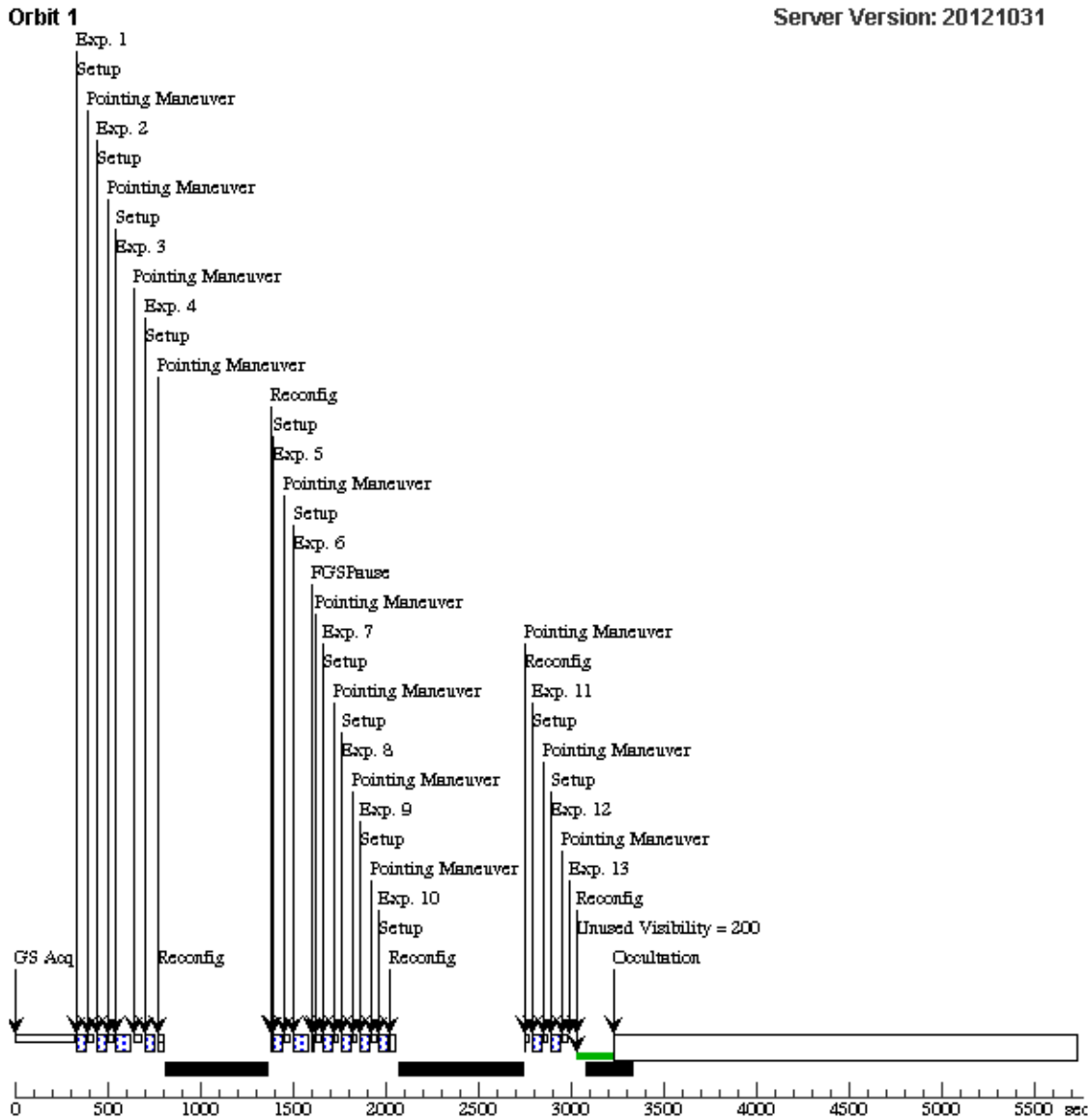
Proposal 12685 - Visit 06 - Enabling Dark Energy Science for JWST and Beyond

#	Label	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time/[Actual Dur.]	Orbit
1	HD-27836 G102	(7) HD-27836	WFC3/IR, MULTIACCUM, IR	G102	NSAMP=6; SAMP-SEQ=RAPID	POS TARG 23,-15; SPATIAL SCAN 0.7 33,90.0 Degrees,Forward		[==>]	[1]
2	HD-27836 G102	(7) HD-27836	WFC3/IR, MULTIACCUM, IR	G102	NSAMP=6; SAMP-SEQ=RAPID	POS TARG -10,-15; SPATIAL SCAN 0.7 33,90.0 Degrees,Forward		[==>]	[1]
3	HD-27836 G102	(7) HD-27836	WFC3/IR, MULTIACCUM, IR	G102	NSAMP=6; SAMP-SEQ=SPARS10	POS TARG -45,-15; SPATIAL SCAN 0.7 33,90.0 Degrees,Forward		[==>]	[1]
4	HD-27836 G102	(7) HD-27836	WFC3/IR, MULTIACCUM, IR	G102	NSAMP=6; SAMP-SEQ=RAPID	POS TARG 23,-28; SPATIAL SCAN 0.7 33,90.0 Degrees,Forward		[==>]	[1]
5	HD-27836 G102	(7) HD-27836	WFC3/IR, MULTIACCUM, IR	G102	NSAMP=6; SAMP-SEQ=RAPID	POS TARG -10,-28; SPATIAL SCAN 0.7 33,90.0 Degrees,Forward		[==>]	[1]
6	HD-27836 G102	(7) HD-27836	WFC3/IR, MULTIACCUM, IR	G102	NSAMP=6; SAMP-SEQ=SPARS10	POS TARG -45,-28; SPATIAL SCAN 0.7 33,90.0 Degrees,Forward		[==>]	[1]
7	HD-27836 G141	(7) HD-27836	WFC3/IR, MULTIACCUM, IR	G141	NSAMP=4; SAMP-SEQ=RAPID	POS TARG 23,+10; SPATIAL SCAN 1.1 458,90.0 Degrees,Forward; EXP PCS MODE G YRO		[==>]	[1]
8	HD-27836 G141	(7) HD-27836	WFC3/IR, MULTIACCUM, IR	G141	NSAMP=4; SAMP-SEQ=RAPID	POS TARG -10,+10; SPATIAL SCAN 1.1 458,90.0 Degrees,Forward; EXP PCS MODE G YRO		[==>]	[1]
9	HD-27836 G141	(7) HD-27836	WFC3/IR, MULTIACCUM, IR	G141	NSAMP=4; SAMP-SEQ=RAPID	POS TARG -45,+10; SPATIAL SCAN 1.1 458,90.0 Degrees,Forward; EXP PCS MODE G YRO		[==>]	[1]
10	HD-27836 G141	(7) HD-27836	WFC3/IR, MULTIACCUM, IR	G141	NSAMP=4; SAMP-SEQ=RAPID	POS TARG 23,+25; SPATIAL SCAN 1.1 458,90.0 Degrees,Forward; EXP PCS MODE G YRO		[==>]	[1]

Proposal 12685 - Visit 06 - Enabling Dark Energy Science for JWST and Beyond

11	HD-27836 G141	(7) HD-27836	WFC3/IR, MULTIACCUM, IR	G141	NSAMP=4; SAMP-SEQ=RAPID	POS TARG -10,+25; SPATIAL SCAN 1.1 458,90.0 Degrees,Forward; EXP PCS MODE G YRO	[==>]	[1]
12	HD-27836 G141	(7) HD-27836	WFC3/IR, MULTIACCUM, IR	G141	NSAMP=4; SAMP-SEQ=RAPID	POS TARG -45,+25; SPATIAL SCAN 1.1 458,90.0 Degrees,Forward; EXP PCS MODE G YRO	[==>]	[1]
13	HD-27836- DirectImage	(7) HD-27836	WFC3/IR, MULTIACCUM, IR	F126N	NSAMP=1; SAMP-SEQ=RAPID	POS TARG -10,+10; EXP PCS MODE G YRO	[==>]	[1]

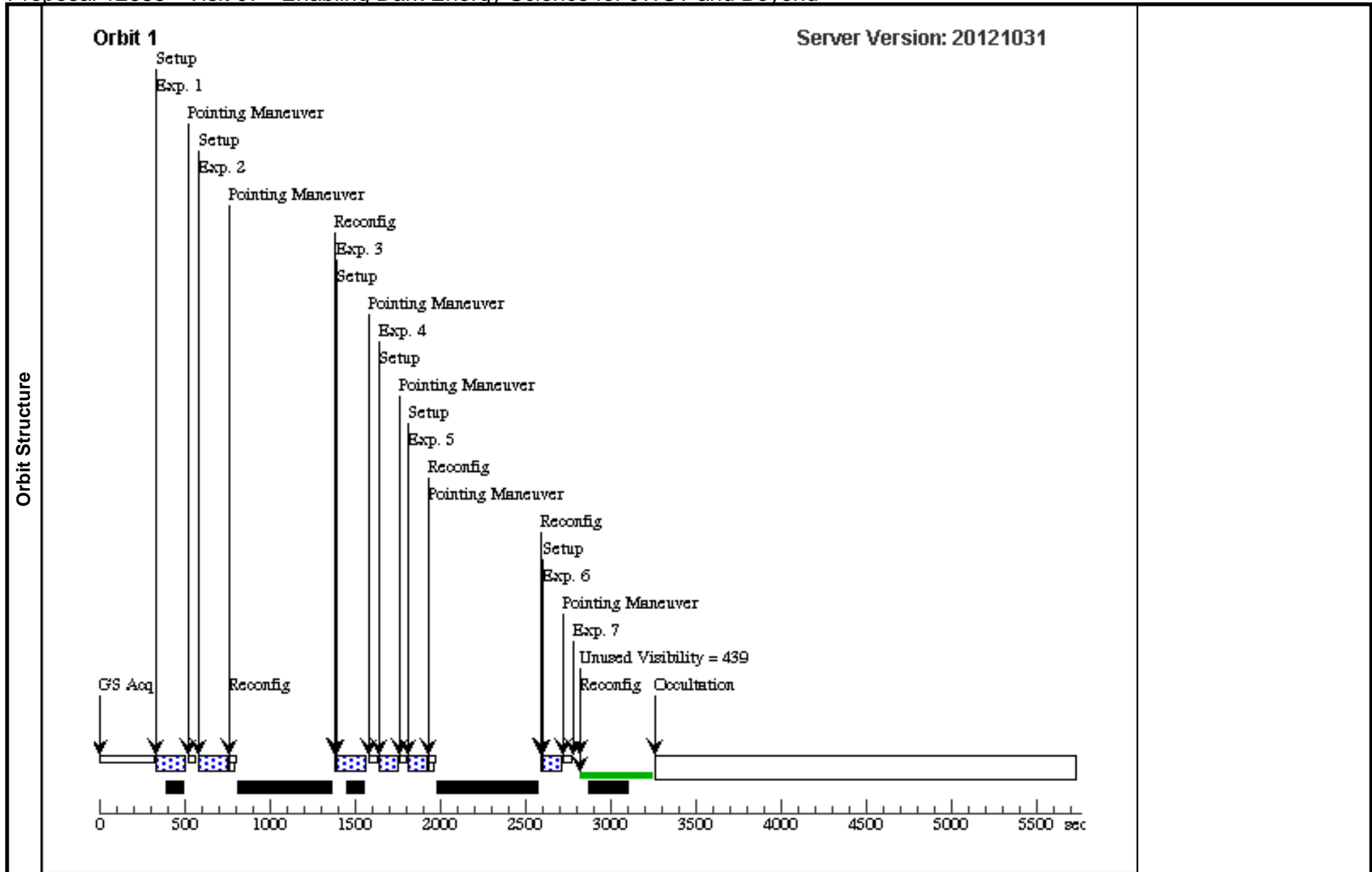
Orbit Structure



Proposal 12685 - Visit 07 - Enabling Dark Energy Science for JWST and Beyond

Tue Apr 23 01:27:53 GMT 2013

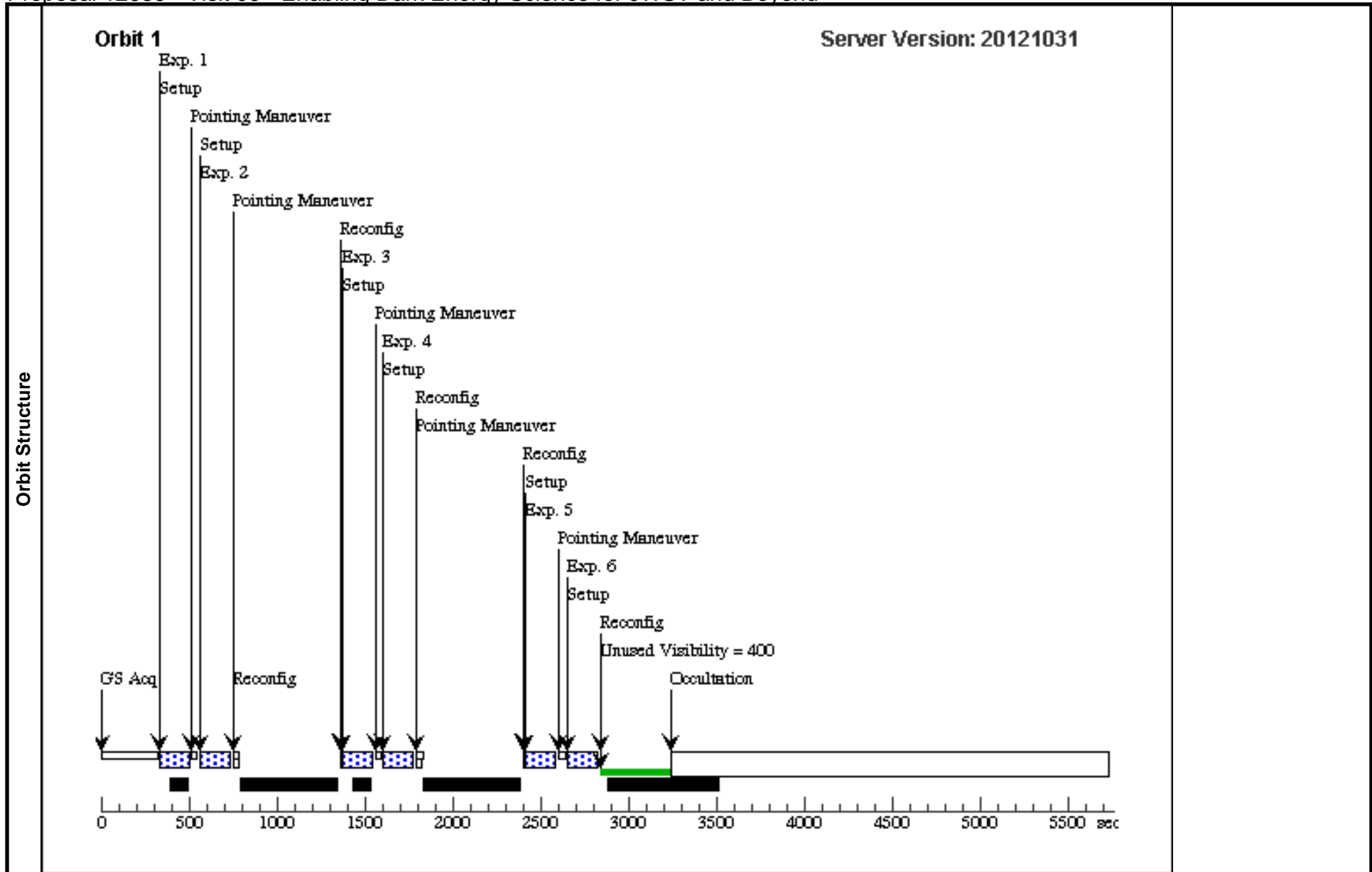
Visit	Proposal 12685, Visit 07, completed Diagnostic Status: No Diagnostics Scientific Instruments: WFC3/IR Special Requirements: (none)									
	Fixed Targets	#	Name	Target Coordinates	Targ. Coord. Corrections	Fluxes	Miscellaneous			
	(8)	LTT-2351 Alt Name1: HD37962	RA: 05 40 51.9668 (85.2165283d) Dec: -31 21 3.99 (-31.35111d) Equinox: J2000	Proper Motion RA: -57.91 mas/yr Proper Motion Dec: -365.20 mas/yr Epoch of Position: 2000	V=7.85 J=6.675, H=6.343, K=6.268	Reference Frame: ICRS				
	<i>Comments: This object was generated by the targetselector and retrieved from the SIMBAD database.</i>									
Exposures	#	Label	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time/[Actual Dur.]	Orbit
	1	LTT-2351 G 102	(8) LTT-2351	WFC3/IR, MULTIACCUM, IR	G102	SAMP-SEQ=SPARS 10; NSAMP=15	POS TARG 23,-15; SPATIAL SCAN 0.5 473,90.0 Degrees,Forward		[==>]	[1]
	2	LTT-2351 G 102	(8) LTT-2351	WFC3/IR, MULTIACCUM, IR	G102	SAMP-SEQ=SPARS 10; NSAMP=15	POS TARG -10,-15; SPATIAL SCAN 0.5 473,90.0 Degrees,Forward		[==>]	[1]
	3	LTT-2351 G 102	(8) LTT-2351	WFC3/IR, MULTIACCUM, IR	G102	SAMP-SEQ=SPARS 10; NSAMP=15	POS TARG -45,-15; SPATIAL SCAN 0.5 473,90.0 Degrees,Forward		[==>]	[1]
	4	LTT-2351 G 141	(8) LTT-2351	WFC3/IR, MULTIACCUM, IR	G141	SAMP-SEQ=SPARS 10; NSAMP=8	POS TARG 28,+10; SPATIAL SCAN 0.8 527,90.0 Degrees,Forward		[==>]	[1]
	5	LTT-2351 G 141	(8) LTT-2351	WFC3/IR, MULTIACCUM, IR	G141	SAMP-SEQ=SPARS 10; NSAMP=8	POS TARG -10,+10; SPATIAL SCAN 0.8 527,90.0 Degrees,Forward		[==>]	[1]
	6	LTT-2351 G 141	(8) LTT-2351	WFC3/IR, MULTIACCUM, IR	G141	SAMP-SEQ=SPARS 10; NSAMP=8	POS TARG -45,+10; SPATIAL SCAN 0.8 527,90.0 Degrees,Forward		[==>]	[1]
	7	LTT-2351 D irectImage	(8) LTT-2351	WFC3/IR, MULTIACCUM, IR	F126N	SAMP-SEQ=RAPID ; NSAMP=1	POS TARG -10,-15		[==>]	[1]



Proposal 12685 - Visit 09 - Enabling Dark Energy Science for JWST and Beyond

Tue Apr 23 01:27:54 GMT 2013

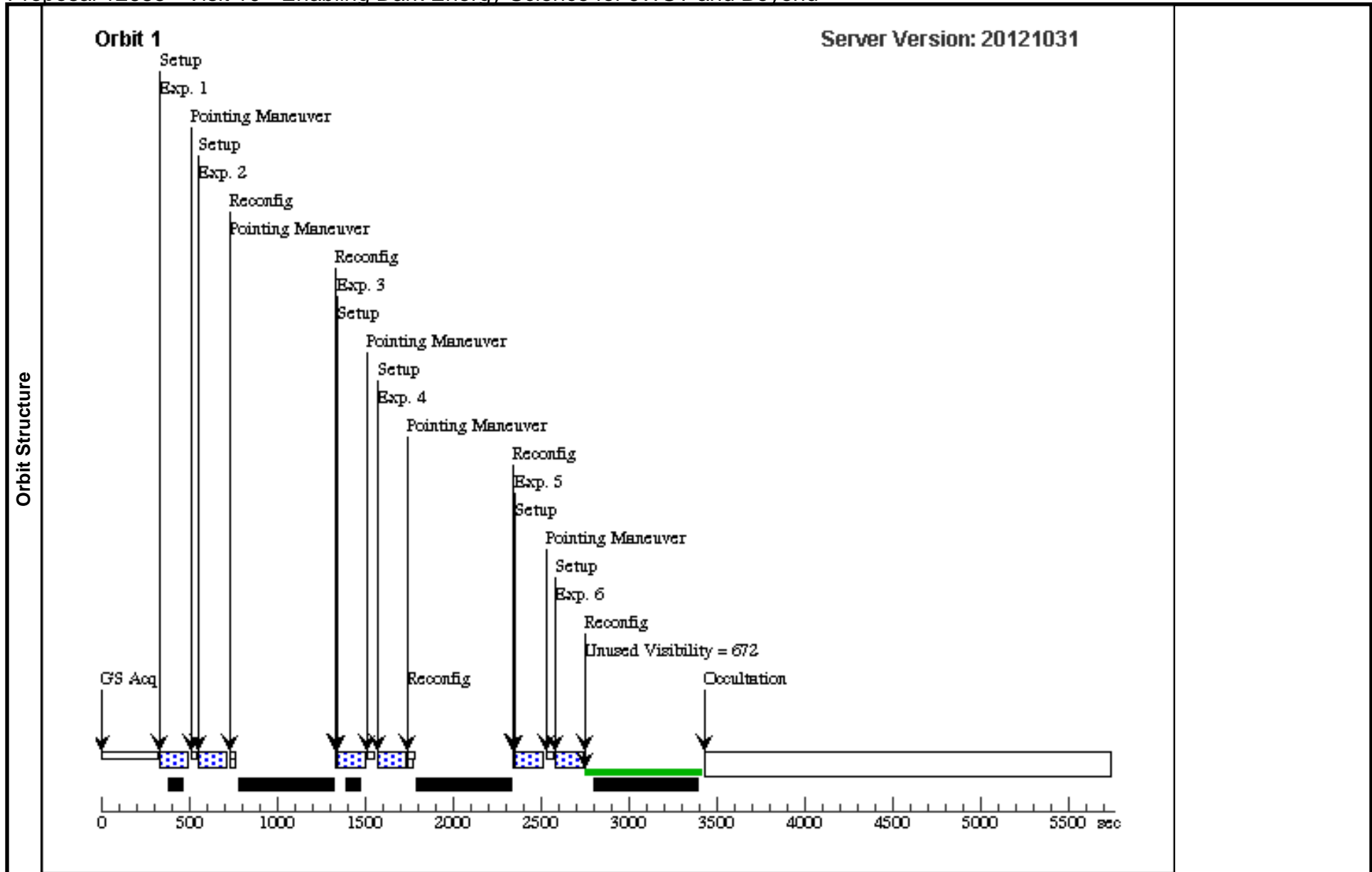
Visit	Proposal 12685, Visit 09, completed Diagnostic Status: No Diagnostics Scientific Instruments: WFC3/IR Special Requirements: (none)									
	Fixed Targets	#	Name	Target Coordinates	Targ. Coord. Corrections	Fluxes	Miscellaneous			
	(13)	HD-38949	RA: 05 48 20.0587 (87.0835779d) Dec: -24 27 49.86 (-24.46385d) Equinox: J2000	Proper Motion RA: -30.47 mas/yr Proper Motion Dec: -36.46 mas/yr Epoch of Position: 2000	V=8.0	Reference Frame: ICRS				
	<i>Comments: This object was generated by the targetselector and retrieved from the SIMBAD database.</i>									
Exposures	#	Label	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time/[Actual Dur.]	Orbit
	1	HD-38949	(13) HD-38949	WFC3/IR, MULTIACCUM, IR	G102	SAMP-SEQ=SPARS 10; NSAMP=15	POS TARG -20,-28; SPATIAL SCAN 0.2 653,90.0 Degrees,Forward		[==>]	[1]
	2	HD-38949	(13) HD-38949	WFC3/IR, MULTIACCUM, IR	G102	SAMP-SEQ=SPARS 10; NSAMP=15	POS TARG -20,-28; SPATIAL SCAN 0.2 653,90.0 Degrees,Forward		[==>]	[1]
	3	HD-38949	(13) HD-38949	WFC3/IR, MULTIACCUM, IR	G102	SAMP-SEQ=SPARS 10; NSAMP=15	POS TARG -20,-28; SPATIAL SCAN 0.2 653,90.0 Degrees,Forward		[==>]	[1]
	4	HD-38949	(13) HD-38949	WFC3/IR, MULTIACCUM, IR	G141	SAMP-SEQ=SPARS 10; NSAMP=15	POS TARG -20,-28; SPATIAL SCAN 0.4 037,90.0 Degrees,Forward		[==>]	[1]
	5	HD-38949	(13) HD-38949	WFC3/IR, MULTIACCUM, IR	G141	SAMP-SEQ=SPARS 10; NSAMP=15	POS TARG -20,-28; SPATIAL SCAN 0.4 037,90.0 Degrees,Forward		[==>]	[1]
	6	HD-38949	(13) HD-38949	WFC3/IR, MULTIACCUM, IR	G141	SAMP-SEQ=SPARS 10; NSAMP=15	POS TARG -20,-28; SPATIAL SCAN 0.4 037,90.0 Degrees,Forward		[==>]	[1]



Proposal 12685 - Visit 10 - Enabling Dark Energy Science for JWST and Beyond

Tue Apr 23 01:27:55 GMT 2013

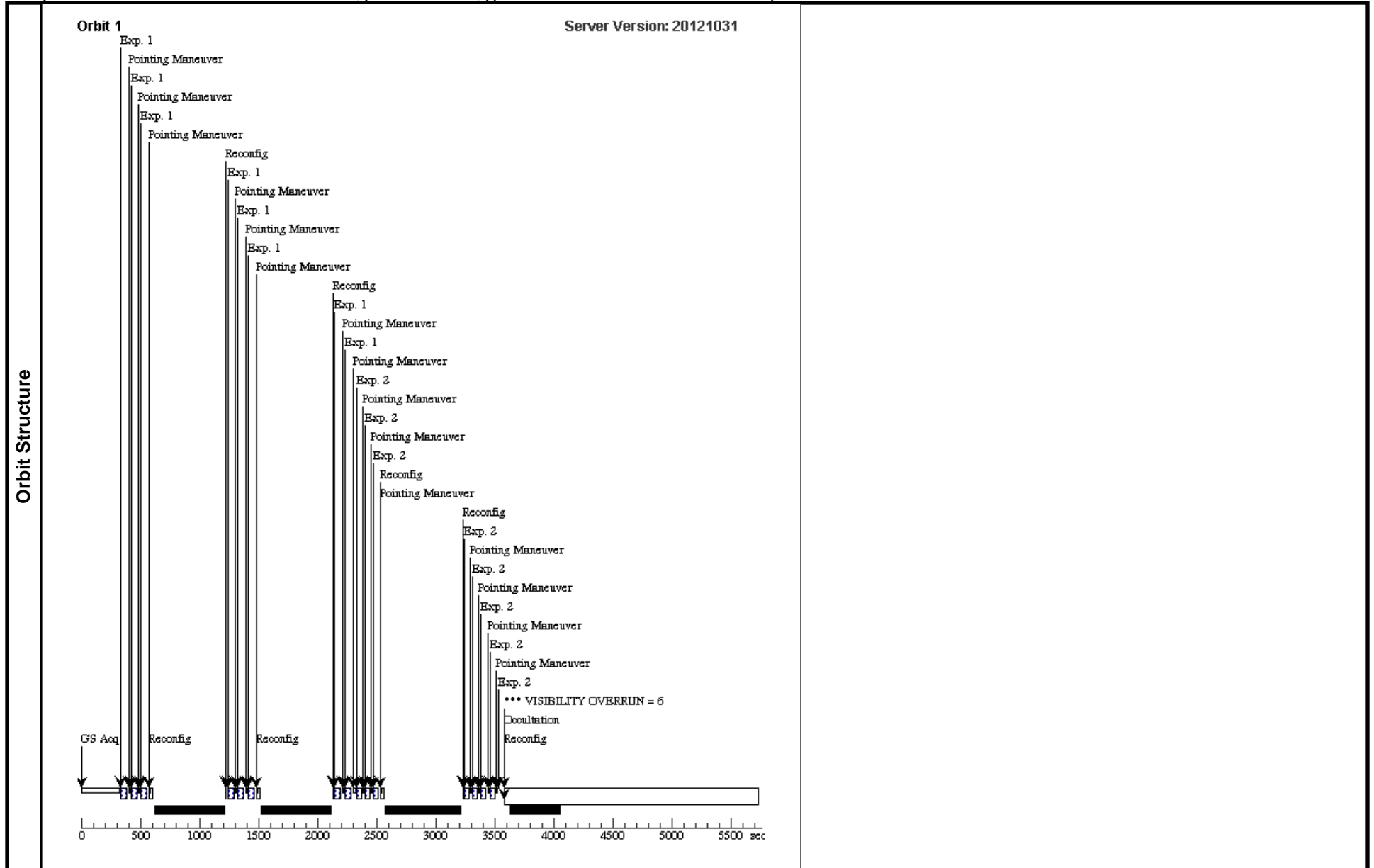
Visit	Proposal 12685, Visit 10, completed Diagnostic Status: No Diagnostics Scientific Instruments: WFC3/IR Special Requirements: (none)									
	Fixed Targets	#	Name	Target Coordinates	Targ. Coord. Corrections	Fluxes	Miscellaneous			
	(14)	HD-60753	RA: 07 33 27.3183 (113.3638262d) Dec: -50 35 3.32 (-50.58426d) Equinox: J2000	Proper Motion RA: -3.46 mas/yr Proper Motion Dec: 5.50 mas/yr Epoch of Position: 2000	V=6.682	Reference Frame: ICRS				
	<i>Comments: This object was generated by the targetselector and retrieved from the SIMBAD database.</i>									
Exposures	#	Label	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time/[Actual Dur.]	Orbit
	1	HD-60753	(14) HD-60753	WFC3/IR, MULTIACCUM, IR	G102	SAMP-SEQ=SPARS 10; NSAMP=14	POS TARG -20,-28; SPATIAL SCAN 0.3 79,90.0 Degrees,For ward		[==>]	[1]
	2	HD-60753	(14) HD-60753	WFC3/IR, MULTIACCUM, IR	G102	SAMP-SEQ=SPARS 10; NSAMP=14	POS TARG -20,-28; SPATIAL SCAN 0.3 79,90.0 Degrees,For ward		[==>]	[1]
	3	HD-60753	(14) HD-60753	WFC3/IR, MULTIACCUM, IR	G102	SAMP-SEQ=SPARS 10; NSAMP=14	POS TARG -20,-23; SPATIAL SCAN 0.3 79,90.0 Degrees,For ward		[==>]	[1]
	4	HD-60753	(14) HD-60753	WFC3/IR, MULTIACCUM, IR	G141	SAMP-SEQ=SPARS 10; NSAMP=14	POS TARG -20,-28; SPATIAL SCAN 0.4 2207,90.0 Degrees,F orward		[==>]	[1]
	5	HD-60753	(14) HD-60753	WFC3/IR, MULTIACCUM, IR	G141	SAMP-SEQ=SPARS 10; NSAMP=14	POS TARG -20,-28; SPATIAL SCAN 0.4 2207,90.0 Degrees,F orward		[==>]	[1]
	6	HD-60753	(14) HD-60753	WFC3/IR, MULTIACCUM, IR	G141	SAMP-SEQ=SPARS 10; NSAMP=14	POS TARG -20,-28; SPATIAL SCAN 0.4 2207,90.0 Degrees,F orward		[==>]	[1]



Proposal 12685 - Visit 81 - Enabling Dark Energy Science for JWST and Beyond

Tue Apr 23 01:27:56 GMT 2013

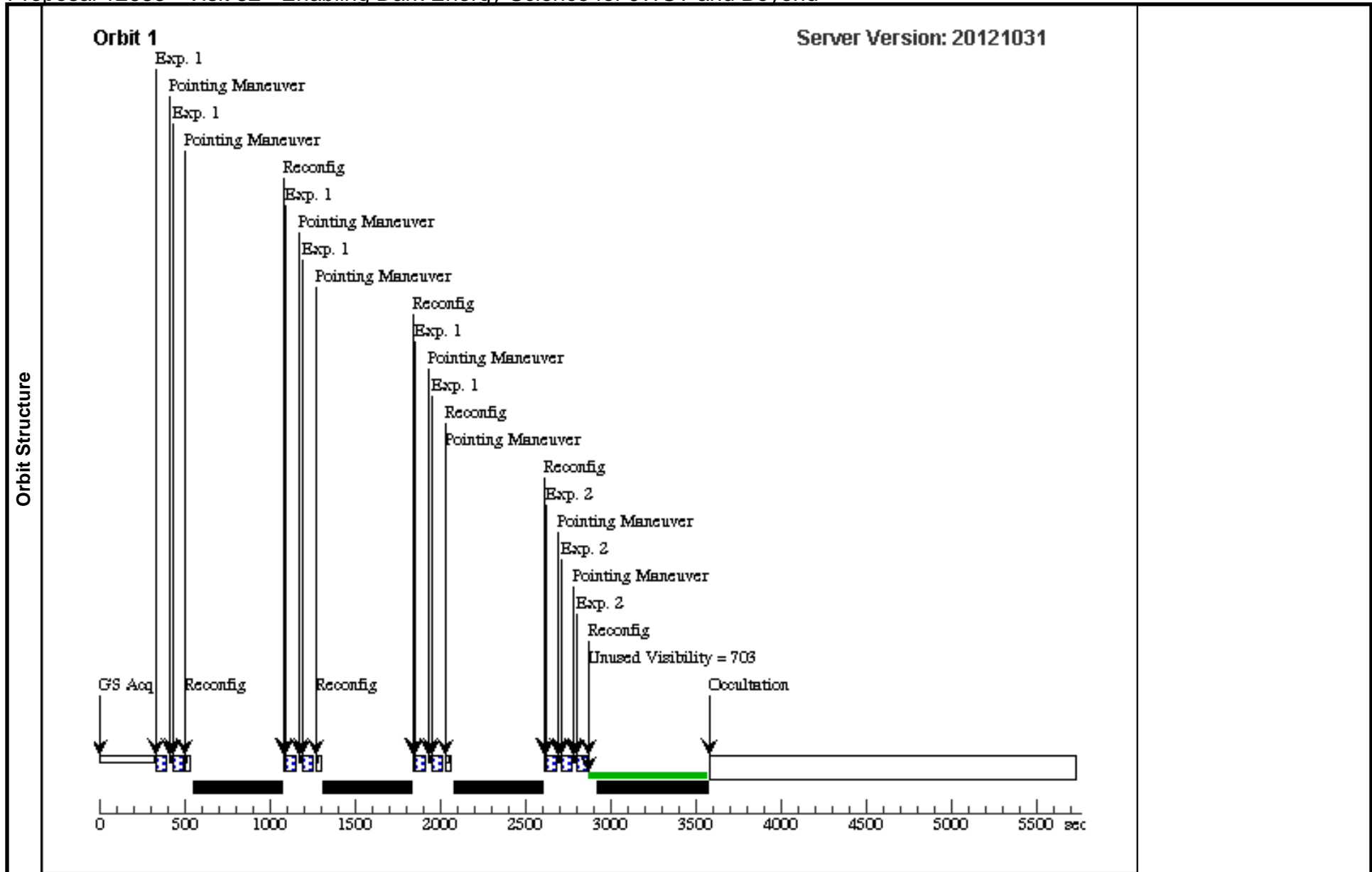
Visit	Proposal 12685, Visit 81, completed Diagnostic Status: Warning Scientific Instruments: WFC3/IR Special Requirements: ORIENT 260D TO 300 D									
	(Visit 81) Warning (Orbit Planner): VISIBILITY OVERRUN									
Diagnos										
Patterns	#	Primary Pattern		Secondary Pattern	Exposures					
	(2)	Pattern Type=LINE Purpose=DITHER Number Of Points=8 Point Spacing=1 Line Spacing=	Coordinate Frame=POS-TARG Pattern Orientation=45 Angle Between Sides= Center Pattern=false		(1), (2)					
Fixed Targets	#	Name	Target Coordinates	Targ. Coord. Corrections	Fluxes	Miscellaneous				
	(16)	2MASS- J17571324+6703409 Alt Name1: 1757142	RA: 17 57 13.2500 (269.3052083d) Dec: +67 03 40.90 (67.06136d) Equinox: J2000		V=12.0	Reference Frame: ICRS				
Comments: This object was generated by the targetselector and retrieved from the SIMBAD database.										
Exposures	#	Label	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time/[Actual Dur.]	Orbit
	1	17571324	(16) 2MASS-J17571324+6703409	WFC3/IR, MULTIACCUM, GRISM1024	G102	NSAMP=9; SAMP-SEQ=RAPID	GS ACQ SCENARIO BASE1B3	Pattern 2, Exps 1-1 in Visit 81 (2)	[==>(Pattern 1)] [==>(Pattern 2)] [==>(Pattern 3)] [==>(Pattern 4)] [==>(Pattern 5)] [==>(Pattern 6)] [==>(Pattern 7)] [==>(Pattern 8)]	[1]
	2	17571324	(16) 2MASS-J17571324+6703409	WFC3/IR, MULTIACCUM, GRISM512	G141	NSAMP=15; SAMP-SEQ=RAPID		Pattern 2, Exps 2-2 in Visit 81 (2)	[==>(Pattern 1)] [==>(Pattern 2)] [==>(Pattern 3)] [==>(Pattern 4)] [==>(Pattern 5)] [==>(Pattern 6)] [==>(Pattern 7)] [==>(Pattern 8)]	[1]



Proposal 12685 - Visit 82 - Enabling Dark Energy Science for JWST and Beyond

Tue Apr 23 01:27:58 GMT 2013

Visit	Proposal 12685, Visit 82, completed Diagnostic Status: No Diagnostics Scientific Instruments: WFC3/IR Special Requirements: ORIENT 20D TO 40 D <i>Comments: need to have FOV oriented such that overlapping spectra are minimized. on APT the ideal rotation angle is 30 deg.</i>									
Patterns	#	Primary Pattern	Secondary Pattern	Exposures						
	(1)	Pattern Type=WFC3-IR-DITHER-LINE-3PT Purpose=DITHER Number Of Points=3 Point Spacing=2 Line Spacing= Coordinate Frame=POS-TARG Pattern Orientation=90 Angle Between Sides= Center Pattern=false		(2)						
(4)	Pattern Type=LINE Purpose=DITHER Number Of Points=6 Point Spacing=2 Line Spacing= Coordinate Frame=POS-TARG Pattern Orientation=90 Angle Between Sides= Center Pattern=false		(1)							
Fixed Targets	#	Name	Target Coordinates	Targ. Coord. Corrections	Fluxes	Miscellaneous				
	(17)	2MASS- J18083474+6927286 Alt Name1: 1808347	RA: 18 08 34.7500 (272.1447917d) Dec: +69 27 28.70 (69.45797d) Equinox: J2000		V=11.9	Reference Frame: ICRS				
<i>Comments: This object was generated by the targetselector and retrieved from the SIMBAD database.</i>										
Exposures	#	Label	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time/[Actual Dur.]	Orbit
	1	18083474	(17) 2MASS-J18083474+6927286	WFC3/IR, MULTIACCUM, GRISM1024	G102	NSAMP=12; SAMP-SEQ=RAPID	POS TARG -20,null; GS ACQ SCENARI O BASE1B3	Pattern 4, Exps 1-1 in Visit 82 (4)	[==>(Pattern 1)] [==>(Pattern 2)] [==>(Pattern 3)] [==>(Pattern 4)] [==>(Pattern 5)] [==>(Pattern 6)]	[1]
2	18083474	(17) 2MASS-J18083474+6927286	WFC3/IR, MULTIACCUM, GRISM1024	G141	NSAMP=10; SAMP-SEQ=RAPID	POS TARG -20,null	Pattern 1, Exps 2-2 in Visit 82 (1)	[==>(Pattern 1)] [==>(Pattern 2)] [==>(Pattern 3)]	[1]	



Proposal 12685 - Visit 83 - Enabling Dark Energy Science for JWST and Beyond

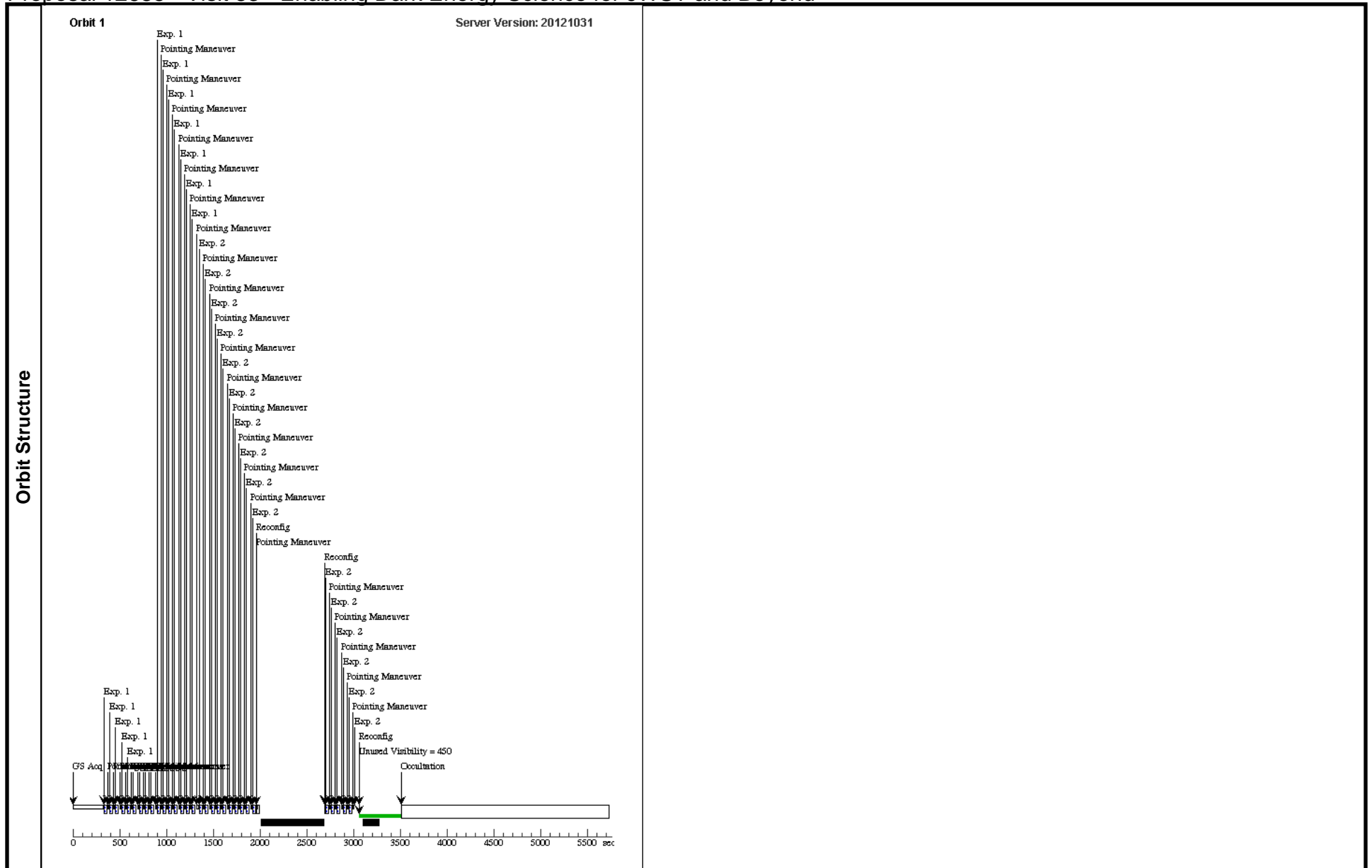
Tue Apr 23 01:27:59 GMT 2013

Visit	Proposal 12685, Visit 83, completed Diagnostic Status: No Diagnostics Scientific Instruments: WFC3/IR Special Requirements: ORIENT 326D TO 346 D <i>Comments: ideal oratio angle is 336 to avoid overlapping spectra from nearby stars</i>					
	Patterns	#	Primary Pattern	Secondary Pattern	Exposures	
	(5)	Pattern Type=LINE Purpose=DITHER Number Of Points=16 Point Spacing=1 Line Spacing=	Coordinate Frame=POS-TARG Pattern Orientation=90 Angle Between Sides= Center Pattern=false		(1), (2)	
Fixed Targets	#	Name	Target Coordinates	Targ. Coord. Corrections	Fluxes	Miscellaneous
	(3)	HD-180609	RA: 19 12 47.1992 (288.1966633d) Dec: +64 10 37.18 (64.17699d) Equinox: J2000	Proper Motion RA: -3.53 mas/yr Proper Motion Dec: -7.82 mas/yr Epoch of Position: 2000	V=9.41	Reference Frame: ICRS
	<i>Comments: This object was generated by the targetselector and retrieved from the SIMBAD database.</i>					

Proposal 12685 - Visit 83 - Enabling Dark Energy Science for JWST and Beyond

#	Label	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time/[Actual Dur.]	Orbit
1	HD-180609	(3) HD-180609	WFC3/IR, MULTIACCUM, GRISM512	G141	NSAMP=4; SAMP-SEQ=RAPID	POS TARG 23,-28	Pattern 5, Exps 1-1 i n Visit 83 (5)	[==>(Pattern 1)] [==>(Pattern 2)] [==>(Pattern 3)] [==>(Pattern 4)] [==>(Pattern 5)] [==>(Pattern 6)] [==>(Pattern 7)] [==>(Pattern 8)] [==>(Pattern 9)] [==>(Pattern 10)] [==>(Pattern 11)] [==>(Pattern 12)] [==>(Pattern 13)] [==>(Pattern 14)] [==>(Pattern 15)] [==>(Pattern 16)]	[1]
2	HD-180609	(3) HD-180609	WFC3/IR, MULTIACCUM, GRISM512	G141	NSAMP=4; SAMP-SEQ=RAPID	POS TARG 23,-28	Pattern 5, Exps 2-2 i n Visit 83 (5)	[==>(Pattern 1)] [==>(Pattern 2)] [==>(Pattern 3)] [==>(Pattern 4)] [==>(Pattern 5)] [==>(Pattern 6)] [==>(Pattern 7)] [==>(Pattern 8)] [==>(Pattern 9)] [==>(Pattern 10)] [==>(Pattern 11)] [==>(Pattern 12)] [==>(Pattern 13)] [==>(Pattern 14)] [==>(Pattern 15)] [==>(Pattern 16)]	[1]

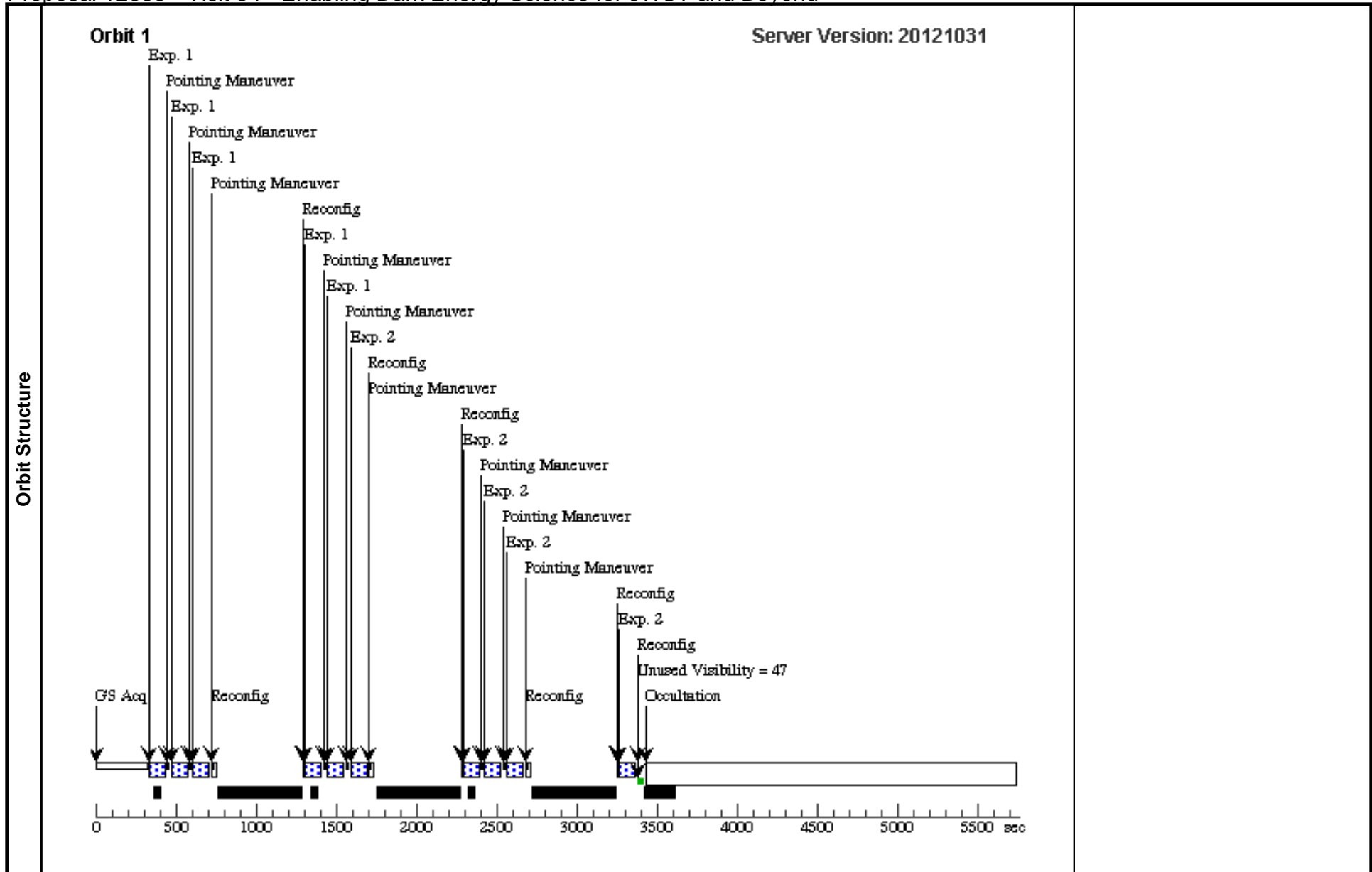
Exposures



Proposal 12685 - Visit 84 - Enabling Dark Energy Science for JWST and Beyond

Tue Apr 23 01:28:00 GMT 2013

Visit	<p>Proposal 12685, Visit 84, completed</p> <p>Diagnostic Status: No Diagnostics</p> <p>Scientific Instruments: WFC3/IR</p> <p>Special Requirements: ORIENT 170D TO 210 D</p> <p><i>Comments: ideal rotation angle is 192 deg to minimize spectra overlaps spectrum runs parallel to X direction dithers are in the Y direction (hopefully)</i></p>									
	Patterns	#	Primary Pattern			Secondary Pattern			Exposures	
(6)		Pattern Type=LINE Purpose=DITHER Number Of Points=5 Point Spacing=2 Line Spacing=	Coordinate Frame=POS-TARG Pattern Orientation=45 Angle Between Sides= Center Pattern=false					(1), (2)		
Fixed Targets	#	Name	Target Coordinates	Targ. Coord. Corrections		Fluxes	Miscellaneous			
	(15)	BD+52-913 Alt Name1: G191B2B	RA: 05 05 30.6128 (76.3775533d) Dec: +52 49 51.96 (52.83110d) Equinox: J2000	Proper Motion RA: 7.45 mas/yr Proper Motion Dec: -89.54 mas/yr Epoch of Position: 2000		V=11.781	Reference Frame: ICRS			
<i>Comments: This object was generated by the targetselector and retrieved from the SIMBAD database.</i>										
Exposures	#	Label	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time/[Actual Dur.]	Orbit
	1	BD+52-913	(15) BD+52-913	WFC3/IR, MULTIACCUM, GRISM1024	G102	NSAMP=8; SAMP-SEQ=SPAR S10	POS TARG -20,null; GS ACQ SCENARI O BASE1B3	Pattern 6, Exps 1-1 i n Visit 84 (6)	[==>(Pattern 1)] [==>(Pattern 2)] [==>(Pattern 3)] [==>(Pattern 4)] [==>(Pattern 5)]	[1]
	2	BD+52-913	(15) BD+52-913	WFC3/IR, MULTIACCUM, GRISM1024	G141	NSAMP=8; SAMP-SEQ=SPAR S10	POS TARG -20,null	Pattern 6, Exps 2-2 i n Visit 84 (6)	[==>(Pattern 1)] [==>(Pattern 2)] [==>(Pattern 3)] [==>(Pattern 4)] [==>(Pattern 5)]	[1]

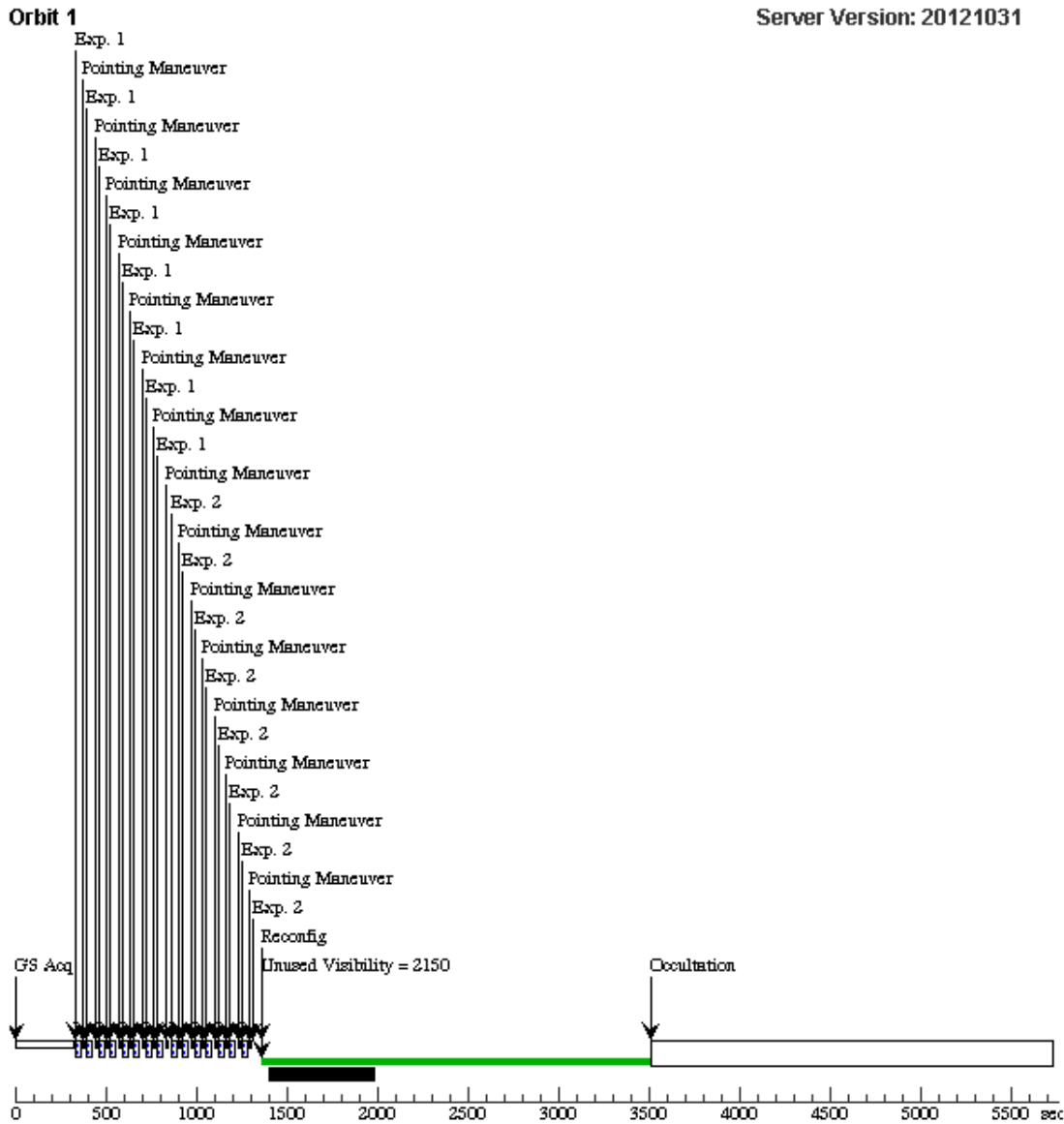


Proposal 12685 - Visit 88 - Enabling Dark Energy Science for JWST and Beyond

Tue Apr 23 01:28:02 GMT 2013

Visit	Proposal 12685, Visit 88, completed Diagnostic Status: No Diagnostics Scientific Instruments: WFC3/IR Special Requirements: (none)									
	Patterns	#	Primary Pattern	Secondary Pattern	Exposures					
	(2)	Pattern Type=LINE Purpose=DITHER Number Of Points=8 Point Spacing=1 Line Spacing=	Coordinate Frame=POS-TARG Pattern Orientation=45 Angle Between Sides= Center Pattern=false		(1), (2)					
Fixed Targets	#	Name	Target Coordinates	Targ. Coord. Corrections	Fluxes	Miscellaneous				
	(12)	BD+60-1753	RA: 17 24 52.2682 (261.2177842d) Dec: +60 25 50.74 (60.43076d) Equinox: J2000	Proper Motion RA: -2.7 mas/yr Epoch of Position: 2000	V=9.67	Reference Frame: ICRS				
<i>Comments: This object was generated by the targetselector and retrieved from the SIMBAD database.</i>										
Exposures	#	Label	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time/[Actual Dur.]	Orbit
	1	BD+60-1753	(12) BD+60-1753	WFC3/IR, MULTIACCUM, GRISM512	G141	NSAMP=6; SAMP-SEQ=RAPID	POS TARG -20,null	Pattern 2, Exps 1-1 in Visit 88 (2)	[=>(Pattern 1)] [=>(Pattern 2)] [=>(Pattern 3)] [=>(Pattern 4)] [=>(Pattern 5)] [=>(Pattern 6)] [=>(Pattern 7)] [=>(Pattern 8)]	[1]
	2	BD+60-1753	(12) BD+60-1753	WFC3/IR, MULTIACCUM, GRISM512	G102	NSAMP=6; SAMP-SEQ=RAPID	POS TARG -20,null	Pattern 2, Exps 2-2 in Visit 88 (2)	[=>(Pattern 1)] [=>(Pattern 2)] [=>(Pattern 3)] [=>(Pattern 4)] [=>(Pattern 5)] [=>(Pattern 6)] [=>(Pattern 7)] [=>(Pattern 8)]	[1]

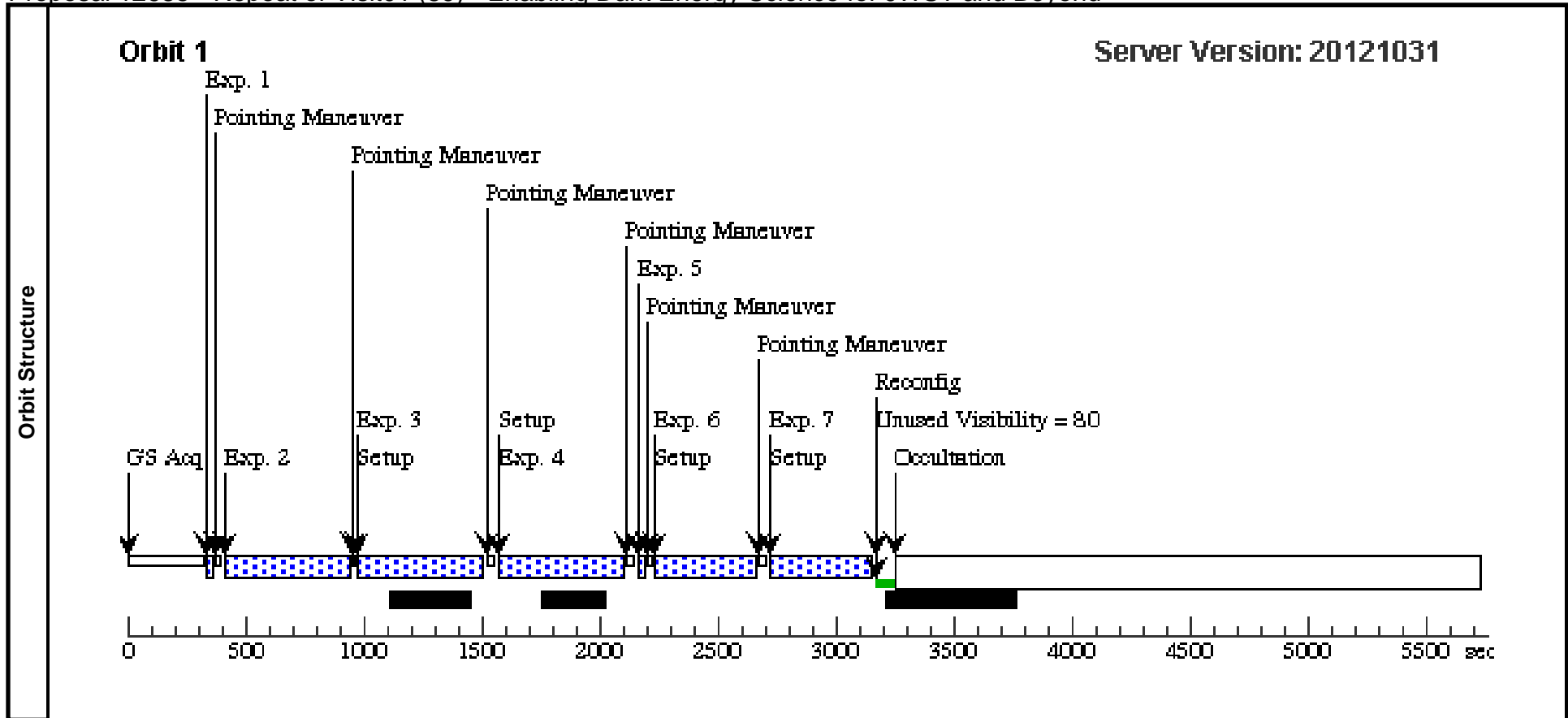
Orbit Structure



Proposal 12685 - Repeat of Visit01 (89) - Enabling Dark Energy Science for JWST and Beyond

Tue Apr 23 01:28:03 GMT 2013

Visit	Proposal 12685, Repeat of Visit01 (89), completed Diagnostic Status: No Diagnostics Scientific Instruments: WFC3/IR Special Requirements: (none) Comments: Repeat Visit01 HOPR									
	Fixed Targets	#	Name	Target Coordinates	Targ. Coord. Corrections	Fluxes	Miscellaneous			
	(1)	HD-37725	RA: 05 41 54.3707 (85.4765446d) Dec: +29 17 50.93 (29.29748d) Equinox: J2000	Proper Motion RA: 16.40 mas/yr Proper Motion Dec: -30.60 mas/yr Epoch of Position: 2000	V=8.82	Reference Frame: ICRS				
	Comments: This object was generated by the targetselector and retrieved from the SIMBAD database.									
Exposures	#	Label	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time/[Actual Dur.]	Orbit
	1		(1) HD-37725	WFC3/IR, MULTIACCUM, IRSUB512	F126N	SAMP-SEQ=RAPID ; NSAMP=1	POS TARG 23,0		[==>]	[1]
	2	HD37725-G 102	(1) HD-37725	WFC3/IR, MULTIACCUM, IR	G102	NSAMP=11; SAMP-SEQ=SPAR S50	POS TARG 23,-28		[==>]	[1]
	3	HD37725-G 102	(1) HD-37725	WFC3/IR, MULTIACCUM, IR	G102	NSAMP=11; SAMP-SEQ=SPAR S50	POS TARG 23,-28; SPATIAL SCAN 0.1 055,90.0 Degrees,Forward		[==>]	[1]
	4	HD37725-G 102	(1) HD-37725	WFC3/IR, MULTIACCUM, IR	G102	NSAMP=11; SAMP-SEQ=SPAR S50	POS TARG 23,-28; SPATIAL SCAN 0.1 055,90.0 Degrees,Forward		[==>]	[1]
	5		(1) HD-37725	WFC3/IR, MULTIACCUM, IRSUB512	F126N	SAMP-SEQ=RAPID ; NSAMP=1	POS TARG 23,-14		[==>]	[1]
	6	HD37725-G 141	(1) HD-37725	WFC3/IR, MULTIACCUM, IR	G141	NSAMP=9; SAMP-SEQ=SPAR S50	POS TARG 23,-28; SPATIAL SCAN 0.1 336,90.0 Degrees,Forward		[==>]	[1]
	7	HD37725-G 141	(1) HD-37725	WFC3/IR, MULTIACCUM, IR	G141	NSAMP=9; SAMP-SEQ=SPAR S50	POS TARG 23,-28; SPATIAL SCAN 0.1 336,90.0 Degrees,Forward		[==>]	[1]



Proposal 12685 - LTT-13402 (5B) - Enabling Dark Energy Science for JWST and Beyond

Tue Apr 23 01:28:04 GMT 2013

Visit	Proposal 12685, LTT-13402 (5B), implementation Diagnostic Status: No Diagnostics Scientific Instruments: WFC3/IR Special Requirements: (none) <i>Comments: revised version of original Visit 05 for LTT 13402</i> <i>Should be using the +1st order with fast scans, not the -1st order.</i> <i>option to move the target by 15arcseconds to the west (i think)</i>																								
	Fixed Targets	<table border="1"> <thead> <tr> <th>#</th> <th>Name</th> <th>Target Coordinates</th> <th>Targ. Coord. Corrections</th> <th>Fluxes</th> <th>Miscellaneous</th> </tr> </thead> <tbody> <tr> <td>(5)</td> <td>LTT-13402</td> <td>RA: 12 13 28.5094 (183.3687892d)</td> <td>Proper Motion RA: 23.76 mas/yr</td> <td>V=7.36</td> <td>Reference Frame: ICRS</td> </tr> <tr> <td></td> <td>Alt Name1: HD106252</td> <td>Dec: +10 02 29.90 (10.04164d)</td> <td>Proper Motion Dec: -279.50 mas/yr</td> <td></td> <td></td> </tr> <tr> <td></td> <td></td> <td>Equinox: J2000</td> <td>Epoch of Position: 2000</td> <td></td> <td></td> </tr> </tbody> </table> <p><i>Comments: This object was generated by the targetselector and retrieved from the SIMBAD database.</i> GOV Proper motions are from SIMBAD</p>	#	Name	Target Coordinates	Targ. Coord. Corrections	Fluxes	Miscellaneous	(5)	LTT-13402	RA: 12 13 28.5094 (183.3687892d)	Proper Motion RA: 23.76 mas/yr	V=7.36	Reference Frame: ICRS		Alt Name1: HD106252	Dec: +10 02 29.90 (10.04164d)	Proper Motion Dec: -279.50 mas/yr					Equinox: J2000	Epoch of Position: 2000	
#	Name	Target Coordinates	Targ. Coord. Corrections	Fluxes	Miscellaneous																				
(5)	LTT-13402	RA: 12 13 28.5094 (183.3687892d)	Proper Motion RA: 23.76 mas/yr	V=7.36	Reference Frame: ICRS																				
	Alt Name1: HD106252	Dec: +10 02 29.90 (10.04164d)	Proper Motion Dec: -279.50 mas/yr																						
		Equinox: J2000	Epoch of Position: 2000																						
Exposures	#	Label	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time/[Actual Dur.]	Orbit															
	1	LTT 13402 - scan=4.06	(5) LTT-13402	WFC3/IR, MULTIACCUM, GRISM1024	G141	NSAMP=8; SAMP-SEQ=RAPID	POS TARG -20,-50; SPATIAL SCAN 4.0 6,90.0 Degrees,Forward; GS ACQ SCENARIO SINGLE		[==>]	[1]															
	2	LTT 13402 scan 4.06	(5) LTT-13402	WFC3/IR, MULTIACCUM, GRISM1024	G141	NSAMP=8; SAMP-SEQ=RAPID	POS TARG -20,-50; SPATIAL SCAN 4.0 6,90.0 Degrees,Forward		[==>]	[1]															
	3	LTT 13402 scan=4.06	(5) LTT-13402	WFC3/IR, MULTIACCUM, GRISM1024	G141	NSAMP=8; SAMP-SEQ=RAPID	POS TARG -20,-50; SPATIAL SCAN 4.0 6,90.0 Degrees,Forward		[==>]	[1]															
	4	LTT 13402 scan=2.8	(5) LTT-13402	WFC3/IR, MULTIACCUM, GRISM1024	G141	NSAMP=12; SAMP-SEQ=RAPID	POS TARG -20,-50; SPATIAL SCAN 2.8 ,90.0 Degrees,Forward		[==>]	[1]															
	5	G102 scan= 2.7	(5) LTT-13402	WFC3/IR, MULTIACCUM, GRISM1024	G102	NSAMP=12; SAMP-SEQ=RAPID	POS TARG -20,-50; SPATIAL SCAN 2.7 ,90.0 Degrees,Forward		[==>]	[1]															
	6	G102 scan= 2.7	(5) LTT-13402	WFC3/IR, MULTIACCUM, GRISM1024	G102	NSAMP=12; SAMP-SEQ=RAPID	POS TARG -20,-50; SPATIAL SCAN 2.7 ,90.0 Degrees,Forward		[==>]	[1]															
	7	G102 scan 2 .7	(5) LTT-13402	WFC3/IR, MULTIACCUM, GRISM1024	G102	NSAMP=13; SAMP-SEQ=RAPID	POS TARG -15,-50; SPATIAL SCAN 2.7 ,90.0 Degrees,Forward		[==>]	[1]															
	8	G102 scan 1 .86	(5) LTT-13402	WFC3/IR, MULTIACCUM, GRISM1024	G102	NSAMP=15; SAMP-SEQ=RAPID	POS TARG -15,-50; SPATIAL SCAN 1.8 6,90.0 Degrees,Forward		[==>]	[1]															

